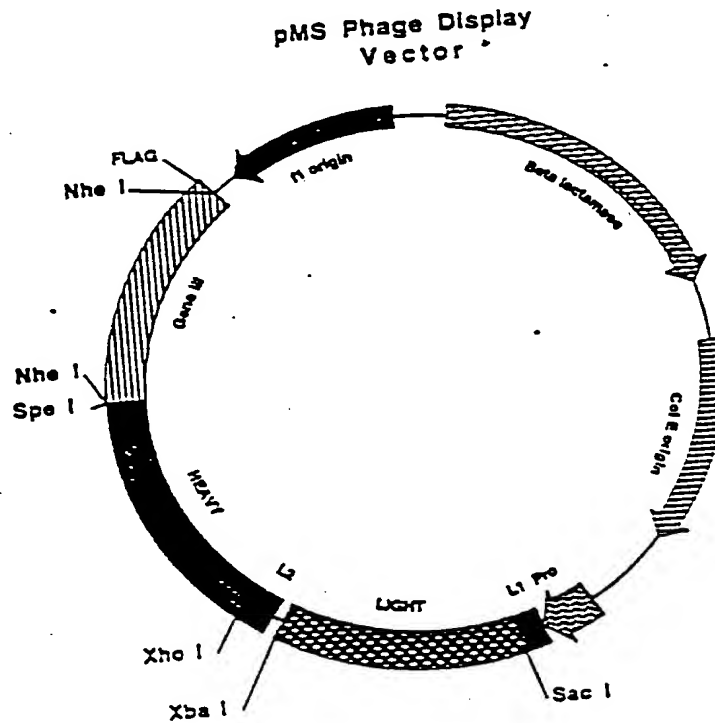


FIGURE 1

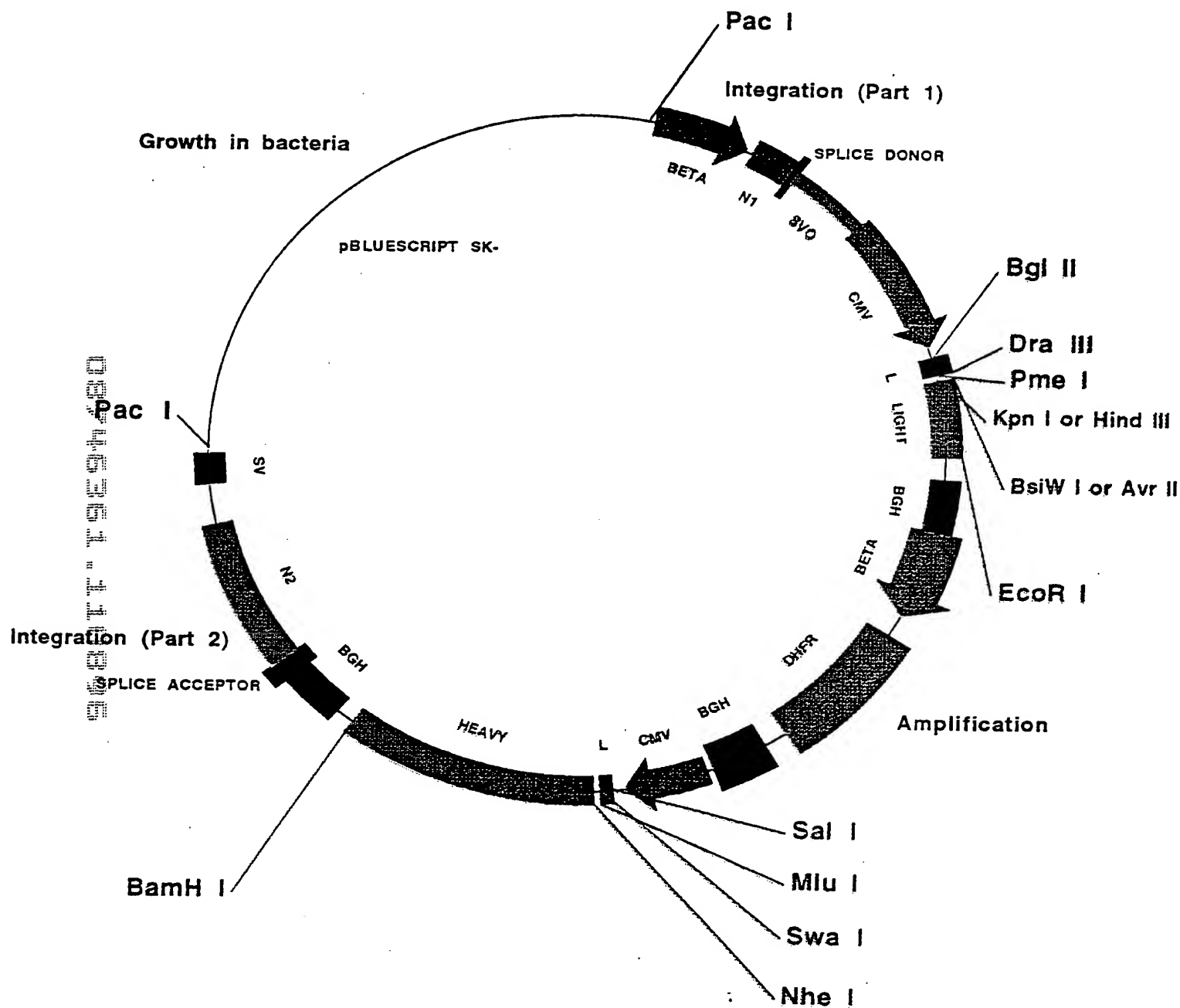
Figure 1: pMS Phage Display Vector. Pro = Lac Z promoter. L1 = Omp A leader. L2 = Pel B leader. Light = light chain. Heavy = heavy chain.



03746361.1.10896

FIGURE 2

NEOSPLA



- CMV = Cytomegalovirus promoter/enhancer
 BETA = Mouse Beta globin major promoter
 SVO = SV40 origin
 BGH = Bovine growth hormone polyadenylation
 SV = SV40 polyadenylation
 N1 = Neomycin phosphotransferase exon 1
 N2 = Neomycin phosphotransferase exon 2
 LIGHT = Human immunoglobulin kappa or lambda constant region
 DHFR = Dihydrofolate Reductase
 HEAVY = Human immunoglobulin gamma 1 or gamma 4 PE constant region
 L = Leader

FIGURE 3a

Length of 7C10 light/Primatized: 705 bp; Listed from: 1 to: 705;
 Translated from: 1 to: 703 (Entire region);
 Genetic Code used: Universal; Fri, May 26, 1995 11:11 AM

```

Frame 1  M   R   V   P   A   Q   L   L   G   L   L   L   L   W   L   P   G   A   R
          ATG AGG GTC CCC GCT CAG CTC CTG GGG CTC CTG CTG CTC TGG CTC CCA GGT GCA CGA
                   9                   18                   27                   36                   45                   54

C   A   Y   E   L   T   Q   P   P   S   V   S   V   S   P   G   Q   T   A   R   I
TGT GCC TAT GAA CTG ACT CAG CCA CCC TCG GTG TCA GTG TCC CCA GGA CAG ACG GCC AGG ATC
    63                   72                   81                   90                   99                   108                   117

T   C   G   G   D   N   S   R   N   E   Y   V   H   W   Y   Q   Q   K   P   A   R
ACC TGT GGG GGA GAC AAC AGT AGA AAT GAA TAT GTC CAC TGG TAC CAG CAG AAG CCA GCG CGG
    126                   135                   144                   153                   162                   171                   180

A   P   I   L   V   I   Y   D   D   S   D   R   P   S   G   I   P   E   R   F   S
GCC CCT ATA CTG GTC ATC TAT GAT GAT AGT GAC CGG CCC TCA GGG ATC CCT GAG CGA TTC TCT
    189                   198                   207                   216                   225                   234                   243

G   S   K   S   G   N   T   A   T   L   T   I   N   G   V   E   A   G   D   E   A
GGC TCC AAA TCA GGG AAC ACC GCC ACC CTG ACC ATC AAC GGG GTC GAG GCC GGG GAT GAG GCT
    252                   261                   270                   279                   288                   297                   306

D   Y   Y   C   Q   V   W   D   R   A   S   D   H   P   V   F   G   G   G   T   R
GAC TAT TAC TGT CAG GTG TGG GAC AGG GCT AGT GAT CAT CCG GTC TTC GGA GGA GGG ACC CGG
    315                   324                   333                   342                   351                   360                   369

V   T   V   L   G   Q   P   K   A   A   P   S   V   T   L   F   P   P   S   S   E
GTG ACC GTC CTA GGT CAG CCC AAG GCT GCC CCC TCG GTC ACT CTG TTC CCG CCC TCC TCT GAG
    378                   387                   396                   405                   414                   423                   432

E   L   Q   A   N   K   A   T   L   V   C   L   I   S   D   F   Y   P   G   A   V
GAG CTT CAA GCC AAC AAG GCC ACA CTG GTG TGT CTC ATA AGT GAC TTC TAC CCG GGA GCC GTG
    441                   450                   459                   468                   477                   486                   495

T   V   A   W   K   A   D   S   S   P   V   K   A   G   V   E   T   T   T   P   S
ACA GTG GCC TGG AAG GCA GAT AGC AGC CCC GTC AAG GCG GGA GTG GAG ACC ACC ACA CCC TCC
    504                   513                   522                   531                   540                   549                   558

K   Q   S   N   N   K   Y   A   A   S   S   Y   L   S   L   T   P   E   Q   W   K
AAA CAA AGC AAC AAC AAG TAC GCG GCC AGC AGC TAC CTG AGC CTG ACG CCT GAG CAG TGG AAG
    567                   576                   585                   594                   603                   612                   621

S   H   R   S   Y   S   C   Q   V   T   H   E   G   S   T   V   E   K   T   V   A
TCC CAC AGA AGC TAC AGC TGC CAG GTC ACG CAT GAA GGG AGC ACC GTG GAG AAG ACA GTG GCC
    630                   639                   648                   657                   666                   675                   684

P   T   E   C   S
CCT ACA GAA TGT TCA TGA
    693                   702
  
```

FIGURE 3b

Length of 7C10 heavy/Primatized: 1431 bp; Listed from: 1 to: 1431;
 Translated from: 1 to: 1429 (Entire region);
 Genetic Code used: Universal; Fri, May 26, 1995 11:11 AM

Frame 1 M K H L W F F L L L V A A P R W V L S
 ATG AAA CAC CTG TGG TTC TTC CTC CTC CTG GTG GCA GCT CCC AGA TGG GTC CTG TCC
 9 18 27 36 45 54
 Q V K L Q Q W G E G L L Q P S E T L S R T
 CAG GTG AAG CTG CAG CAG TGG GGC GAA GGA CTT CTG CAG CCT TCG GAG ACC CTG TCC CGC ACC
 63 72 81 90 99 108 117
 C V V S G G S I S G Y Y Y W T W I R Q T P
 TGC GTT GTC TCT GGT GGC TCC ATC AGC GGT TAC TAC TAC TGG ACC TGG ATC CGC CAG ACC CCA
 126 135 144 153 162 171 180
 G R G L E W I G H I Y G N G A T T N Y N P
 GGG AGG GGA CTG GAG TGG ATT GGC CAT ATT TAT GGT AAT GGT GCG ACC ACC AAC TAC AAT CCC
 189 198 207 216 225 234 243
 S L K S R V T I S K D T S K N Q F F L N L
 TCC CTC AAG AGT CGA GTC ACC ATT TCA AAA GAC ACG TCC AAG AAC CAG TTC TTC CTG AAC TTG
 252 261 270 279 288 297 306
 N S V T D A D T A V Y Y C A R G P R P D C
 AAT TCT GTG ACC GAC GCG GAC ACG GCC GTC TAT TAC TGT GCG AGA GGC CCT CGC CCT GAT TGC
 315 324 333 342 351 360 369
 T T I C Y G G W V D V W G P G D L V T V S
 ACA ACC ATT TGT TAT GGC GGC TGG GTC GAT GTC TGG GGC CCG GGA GAC CTG GTC ACC GTC TCC
 378 387 396 405 414 423 432
 S A S T K G P S V F P L A P S S K S T S G
 TCA GCT AGC ACC AAG GGC CCA TCG GTC TTC CCC CTG GCA CCC TCC TCC AAG AGC ACC TCT GGG
 441 450 459 468 477 486 495
 G T A A L G C L V K D Y F P E P V T V S W
 GGC ACA GCG GCC CTG GGC TGC CTG GTC AAG GAC TAC TTC CCC GAA CCG GTG ACG GTG TCG TGG
 504 513 522 531 540 549 558
 N S G A L T S G V H T F P A V L Q S S G L
 AAC TCA GGC GCC CTG ACC AGC GGC GTG CAC ACC TTC CCG GCT GTC CTA CAG TCC TCA GGA CTC
 567 576 585 594 603 612 621
 Y S L S S V V T V P S S S L G T Q T Y I C
 TAC TCC CTC AGC AGC GTG GTG ACC GTG CCC TCC AGC AGC TTG GGC ACC CAG ACC TAC ATC TGC
 630 639 648 657 666 675 684
 N V N H K P S N T K V D K K A E P K S C D
 AAC GTG AAT CAC AAG CCC AGC AAC ACC AAG GTG GAC AAG AAA GCA GAG CCC AAA TCT TGT GAC
 693 702 711 720 729 738 747
 K T H T C P P C P A P E L L G G P S V F L
 AAA ACT CAC ACA TGC CCA CCG TGC CCA GCA CCT GAA CTC CTG GGG GGA CCG TCA GTC TTC CTC
 756 765 774 783 792 801 810
 F P P K P K D T L M I S R T P E V T C V V
 TTC CCC CCA AAA CCC AAG GAC ACC CTC ATG ATC TCC CGG ACC CCT GAG GTC ACA TGC GTG GTG
 819 828 837 846 855 864 873
 V D V S H E D P E V K F N W Y V D G V E V
 GTG GAC GTG AGC CAC GAA GAC CCT GAG GTC AAG TTC AAC TGG TAC GTG GAC GGC GTG GAG GTG
 882 891 900 909 918 927 936

FIGURE 3b (Continued)

H	N	A	K	T	K	P	R	E	E	Q	Y	N	S	T	Y	R	V	V	S	V
CAT	AAT	GCC	AAG	ACA	AAG	CCG	CGG	GAG	GAG	CAG	TAC	AAC	AGC	ACG	TAC	CGT	GTG	GTC	AGC	GTC
945				954			963			972			981			990			999	
L	T	V	L	H	Q	D	W	L	N	G	K	E	Y	K	C	K	V	S	N	K
CTC	ACC	GTC	CTG	CAC	CAG	GAC	TGG	CTG	AAT	GGC	AAG	GAG	TAC	AAG	TGC	AAG	GTG	TCC	AAC	AAA
1008				1017			1026			1035			1044			1053			1062	
A	L	P	A	P	I	E	K	T	I	S	K	A	K	G	Q	P	R	E	P	Q
GCC	CTC	CCA	GCC	CCC	ATC	GAG	AAA	ACC	ATC	TCC	AAA	GCC	AAA	GGG	CAG	CCC	CGA	GAA	CCA	CAG
1071				1080			1089			1098			1107			1116			1125	
V	Y	T	L	P	P	S	R	D	E	L	T	K	N	Q	V	S	L	T	C	L
GTG	TAC	ACC	CTG	CCC	CCA	TCC	CGG	GAT	GAG	CTG	ACC	AAG	AAC	CAG	GTG	AGC	CTG	ACC	TGC	CTG
1134				1143			1152			1161			1170			1179			1188	
V	K	G	F	Y	P	S	D	I	A	V	E	W	E	S	N	G	Q	P	E	N
GTC	AAA	GGC	TTC	TAT	CCC	AGC	GAC	ATC	GCC	GTG	GAG	TGG	GAG	AGC	AAT	GGG	CAG	CCG	GAG	AAC
1197				1206			1215			1224			1233			1242			1251	
N	Y	K	T	T	P	P	V	L	D	S	D	G	S	F	F	L	Y	S	K	L
AAC	TAC	AAG	ACC	ACG	CCT	CCC	GTG	CTG	GAC	TCC	GAC	GGC	TCC	TTC	TTC	CTC	TAC	AGC	AAG	CTC
1260				1269			1278			1287			1296			1305			1314	
T	V	D	K	S	R	W	Q	Q	G	N	V	F	S	C	S	V	M	H	E	A
ACC	GTG	GAC	AAG	AGC	AGG	TGG	CAG	CAG	GGG	AAC	GTG	TTC	TCA	TGC	TCC	GTG	ATG	CAT	GAG	GCT
1323				1332			1341			1350			1359			1368			1377	
L	H	N	H	Y	T	Q	K	S	L	S	L	S	P	G	K	.				
CTG	CAC	AAC	CAC	TAC	ACG	CAG	AAG	AGC	CTC	TCC	CTG	TCT	CCG	GGT	AAA	TGA				
1386				1395			1404			1413			1422			1431				

FIGURE 4a

Length of 7B6 light/Primatized: 720 bp; Listed from: 1 to: 720;
 Translated from: 1 to: 718 (Entire region);
 Genetic Code used: Universal; Fri, May 26, 1995 11:10 AM

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Frame 1  M   S   L   P   A   Q   L   L   G   L   L   L   L   C   V   P   G   S   S
          ATG AGC CTC CCT GCT CAG CTC CTC GGG CTG CTA TTG CTC TGC GTC CCC GGG TCC TCC AGT
                        9                18                27                36                45                54

G   E   V   V   M   T   Q   S   P   L   S   L   P   I   T   P   G   E   P   A   S
GGG GAA GTT GTG ATG ACT CAG TCT CCA CTG TCC CTT CCC ATC ACA CCT GGA GAG CCG GCC TCC
    63                72                81                90                99                108                117

I   S   C   R   S   S   Q   S   L   K   H   S   N   G   D   T   F   L   S   W   Y
ATC TCC TGT AGG TCT AGT CAA AGC CTT AAA CAC AGT AAT GGA GAC ACC TTC CTG AGT TGG TAT
    126                135                144                153                162                171                180

Q   Q   K   P   G   Q   P   P   R   L   L   I   Y   K   V   S   N   R   D   S   G
CAG CAG AAG CCA GGC CAA CCT CCA AGG CTC CTG ATT TAT AAG GTT TCT AAC CGG GAC TCT GGG
    189                198                207                216                225                234                243

V   P   D   R   F   S   G   S   G   A   G   T   D   F   T   L   K   I   S   A   V
GTC CCA GAC AGA TTC AGC GGC AGT GGG GCA GGG ACA GAT TTC ACA CTG AAA ATC AGC GCA GTG
    252                261                270                279                288                297                306

E   A   E   D   V   G   V   Y   F   C   G   Q   G   T   R   T   P   P   T   F   G
GAG GCT GAA GAT GTT GGG GTT TAT TTC TGC GGG CAA GGT ACA AGG ACT CCT CCC ACT TTC GGC
    315                324                333                342                351                360                369

G   G   T   K   V   E   I   K   R   T   V   A   A   P   S   V   F   I   F   P   P
GGA GGG ACC AAG GTG GAA ATC AAA CGT ACG GTG GCT GCA CCA TCT GTC TTC ATC TTC CCG CCA
    378                387                396                405                414                423                432

S   D   E   Q   L   K   S   G   T   A   S   V   V   C   L   L   N   N   F   Y   P
TCT GAT GAG CAG TTG AAA TCT GGA ACT GCC TCT GTT GTG TGC CTG CTG AAT AAC TTC TAT CCC
    441                450                459                468                477                486                495

R   E   A   K   V   Q   W   K   V   D   N   A   L   Q   S   G   N   S   Q   E   S
AGA GAG GCC AAA GTA CAG TGG AAG GTG GAT AAC GCC CTC CAA TCG GGT AAC TCC CAG GAG AGT
    504                513                522                531                540                549                558

V   T   E   Q   D   S   K   D   S   T   Y   S   L   S   S   T   L   T   L   S   K
GTC ACA GAG CAG GAC AGC AAG GAC AGC ACC TAC AGC CTC AGC AGC ACC CTG ACG CTG AGC AAA
    567                576                585                594                603                612                621

A   D   Y   E   K   H   K   V   Y   A   C   E   V   T   H   Q   G   L   S   S   P
GCA GAC TAC GAG AAA CAC AAA GTC TAC GCC TGC GAA GTC ACC CAT CAG GGC CTG AGC TCG CCC
    630                639                648                657                666                675                684

V   T   K   S   F   N   R   G   E   C
GTC ACA AAG AGC TTC AAC AGG GGA GAG TGT TGA
    693                702                711                720
  
```

FIGURE 4b

Length of 7B6 heavy/Primatized: 1437 bp; Listed from: 1 to: 1437;
 Translated from: 1 to: 1435 (Entire region);
 Genetic Code used: Universal; Fri, May 26, 1995 11:09 AM

Frame 1	M	G	W	S	L	I	L	L	F	L	V	A	V	A	T	R	V	Q	C	
	ATG	GGT	TGG	AGC	CTC	ATC	TTG	CTC	TTC	CTT	GTC	GCT	GTT	GCT	ACG	CGT	GTC	CAG	TGT	
			9			18			27			36			45			54		
E	V	Q	L	V	E	S	G	G	G	L	V	Q	P	G	G	S	L	R	V	S
GAG	GTG	CAA	CTG	GTG	GAG	TCT	GGG	GGA	GGC	TTG	GTC	CAG	CCT	GGC	GGG	TCC	CTG	AGA	GTC	TCC
	63			72			81			90			99			108			117	
C	A	V	S	G	F	T	F	S	D	H	Y	M	Y	W	F	R	Q	A	P	G
TGT	GCA	GTC	TCT	GGA	TTC	ACC	TTC	AGT	GAC	CAC	TAC	ATG	TAT	TGG	TTC	CGC	CAG	GCT	CCA	GGG
	126			135			144			153			162			171			180	
K	G	P	E	W	V	G	F	I	R	N	K	P	N	G	G	T	T	E	Y	A
AAG	GGG	CCG	GAA	TGG	GTA	GGT	TTC	ATT	AGA	AAC	AAA	CCG	AAC	GGT	GGG	ACA	ACA	GAA	TAC	GCC
	189			198			207			216			225			234			243	
A	S	V	K	D	R	F	T	I	S	R	D	D	S	K	S	I	A	Y	L	Q
GCG	TCT	GTG	AAA	GAC	AGA	TTC	ACC	ATC	TCC	AGA	GAT	GAT	TCC	AAA	AGC	ATC	GCC	TAT	CTG	CAA
	252			261			270			279			288			297			306	
M	S	S	L	K	I	E	D	T	A	V	Y	Y	C	T	T	S	Y	I	S	H
ATG	AGC	AGC	CTG	AAA	ATC	GAG	GAC	ACG	GCC	GTC	TAT	TAC	TGT	ACT	ACA	TCC	TAC	ATT	TCA	CAT
	315			324			333			342			351			360			369	
C	R	G	G	V	C	Y	G	G	Y	F	E	F	W	G	Q	G	A	L	V	T
TGT	CGG	GGT	GGT	GTC	TGC	TAT	GGA	GGT	TAC	TTC	GAA	TTC	TGG	GGC	CAG	GGC	GCC	CTG	GTC	ACC
	378			387			396			405			414			423			432	
V	S	S	A	S	T	K	G	P	S	V	F	P	L	A	P	S	S	K	S	T
GTC	TCC	TCA	GCT	AGC	ACC	AAG	GGC	CCA	TCG	GTC	TTC	CCC	CTG	GCA	CCC	TCC	TCC	AAG	AGC	ACC
	441			450			459			468			477			486			495	
S	G	G	T	A	A	L	G	C	L	V	K	D	Y	F	P	E	P	V	T	V
TCT	GGG	GGC	ACA	GCG	GCC	CTG	GGC	TGC	CTG	GTC	AAG	GAC	TAC	TTC	CCC	GAA	CCG	GTG	ACG	GTG
	504			513			522			531			540			549			558	
S	W	N	S	G	A	L	T	S	G	V	H	T	F	P	A	V	L	Q	S	S
TCG	TGG	AAC	TCA	GGC	GCC	CTG	ACC	AGC	GGC	GTG	CAC	ACC	TTC	CCG	GCT	GTC	CTA	CAG	TCC	TCA
	567			576			585			594			603			612			621	
G	L	Y	S	L	S	S	V	V	T	V	P	S	S	S	L	G	T	Q	T	Y
GGA	CTC	TAC	TCC	CTC	AGC	AGC	GTG	GTG	ACC	GTG	CCC	TCC	AGC	AGC	TTG	GGC	ACC	CAG	ACC	TAC
	630			639			648			657			666			675			684	
I	C	N	V	N	H	K	P	S	N	T	K	V	D	K	K	A	E	P	K	S
ATC	TGC	AAC	GTG	AAT	CAC	AAG	CCC	AGC	AAC	ACC	AAG	GTG	GAC	AAG	AAA	GCA	GAG	CCC	AAA	TCT
	693			702			711			720			729			738			747	
C	D	K	T	H	T	C	P	P	C	P	A	P	E	L	L	G	G	P	S	V
TGT	GAC	AAA	ACT	CAC	ACA	TGC	CCA	CCG	TGC	CCA	GCA	CCT	GAA	CTC	CTG	GGG	GGA	CCG	TCA	GTC
	756			765			774			783			792			801			810	
F	L	F	P	P	K	P	K	D	T	L	M	I	S	R	T	P	E	V	T	C
TTC	CTC	TTC	CCC	CCA	AAA	CCC	AAG	GAC	ACC	CTC	ATG	ATC	TCC	CGG	ACC	CCT	GAG	GTC	ACA	TGC
	819			828			837			846			855			864			873	
V	V	V	D	V	S	H	E	D	P	E	V	K	F	N	W	Y	V	D	G	V
GTG	GTG	GTG	GAC	GTG	AGC	CAC	GAA	GAC	CCT	GAG	GTC	AAG	TTC	AAC	TGG	TAC	GTG	GAC	GGC	GTG
	882			891			900			909			918			927			936	

FIGURE 4b (Continued)

E	V	H	N	A	K	T	K	P	R	E	E	Q	Y	N	S	T	Y	R	V	V
GAG	GTG	CAT	AAT	GCC	AAG	ACA	AAG	CCG	CGG	GAG	GAG	CAG	TAC	AAC	AGC	ACG	TAC	CGT	GTG	GTC
945				954			963			972			981			990			999	
S	V	L	T	V	L	H	Q	D	W	L	N	G	K	E	Y	K	C	K	V	S
AGC	GTC	CTC	ACC	GTC	CTG	CAC	CAG	GAC	TGG	CTG	AAT	GGC	AAG	GAG	TAC	AAG	TGC	AAG	GTC	TCC
1008				1017			1026			1035			1044			1053			1062	
N	K	A	L	P	A	P	I	E	K	T	I	S	K	A	K	G	Q	P	R	E
AAC	AAA	GCC	CTC	CCA	GCC	CCC	ATC	GAG	AAA	ACC	ATC	TCC	AAA	GCC	AAA	GGG	CAG	CCC	CGA	GAA
1071				1080			1089			1098			1107			1116			1125	
P	Q	V	Y	T	L	P	P	S	R	D	E	L	T	K	N	Q	V	S	L	T
CCA	CAG	GTG	TAC	ACC	CTG	CCC	CCA	TCC	CGG	GAT	GAG	CTG	ACC	AAG	AAC	CAG	GTC	AGC	CTG	ACC
1134				1143			1152			1161			1170			1179			1188	
C	L	V	K	G	F	Y	P	S	D	I	A	V	E	W	E	S	N	G	Q	P
TGC	CTG	GTC	AAA	GGC	TTC	TAT	CCC	AGC	GAC	ATC	GCC	GTG	GAG	TGG	GAG	AGC	AAT	GGG	CAG	CCG
1197				1206			1215			1224			1233			1242			1251	
E	N	N	Y	K	T	T	P	P	V	L	D	S	D	G	S	F	F	L	Y	S
GAG	AAC	AAC	TAC	AAG	ACC	ACG	CCT	CCC	GTG	CTG	GAC	TCC	GAC	GGC	TCC	TTC	TTC	CTC	TAC	AGC
1260				1269			1278			1287			1296			1305			1314	
K	L	T	V	D	K	S	R	W	Q	Q	G	N	V	F	S	C	S	V	M	H
AAG	CTG	ACC	GTG	GAC	AAG	AGC	AGG	TGG	CAG	CAG	GGG	AAC	GTC	TTC	TCA	TGC	TCC	GTG	ATG	CAT
1323				1332			1341			1350			1359			1368			1377	
E	A	L	H	N	H	Y	T	Q	K	S	L	S	L	S	P	G	K	.		
GAG	GCT	CTG	CAC	AAC	CAC	TAC	ACG	CAG	AAG	AGC	CTC	TCC	CTG	TCT	CCG	GGT	AAA	TGA		
1386				1395			1404			1413			1422			1431				

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FIGURE 5a

Length of 16C10 Lambda/Primatized : 711 bp;
 Listed from: 1 to: 711;
 Translated from: 1 to: 709 (Entire region);
 Genetic Code used: Universal; Fri, May 26, 1995 11:08 AM

```

Frame 1  M  R  V  P  A  Q  L  L  G  L  L  L  L  W  L  P  G  A  R
          ATG AGG GTC CCC GCT CAG CTC CTG GGG CTC CTG CTG CTC TGG LCT CCA GGT GCA CGA
                9                18                27                36                45                54

C  E  S  V  L  T  Q  P  P  S  V  S  G  A  P  G  Q  K  V  T  I
TGT GAG TCT GTC CTG ACA CAG CCG CCC TCA GTG TCT GGG GCC CCA GGG CAG AAG GTC ACC ATC
    63          72          81          90          99          108          117

S  C  T  G  S  T  S  N  I  G  G  Y  D  L  H  W  Y  Q  Q  L  P
TCG TGC ACT GGG AGC ACC TCC AAC ATT GGA GGT TAT GAT CTA CAT TGG TAC CAG CAG CTC CCA
    126          135          144          153          162          171          180

G  T  A  P  K  L  L  I  Y  D  I  N  K  R  P  S  G  I  S  D  R
GGA ACG GCC CCC AAA CTC CTC ATC TAT GAC ATT AAC AAG CGA CCC TCA GGA ATT TCT GAC CGA
    189          198          207          216          225          234          243

F  S  G  S  K  S  G  T  A  A  S  L  A  I  T  G  L  Q  T  E  D
TTC TCT GGC TCC AAG TCT GGT ACC GCG GCC TCC CTG GCC ATC ACT GGG CTC CAG ACT GAG GAT
    252          261          270          279          288          297          306

E  A  D  Y  Y  C  Q  S  Y  D  S  S  L  N  A  Q  V  F  G  G  G
GAG GCT GAT TAT TAC TGC CAG TCC TAT GAC AGC AGC CTG AAT GCT CAG GTA TTC GGA GGA GGG
    315          324          333          342          351          360          369

T  R  L  T  V  L  G  Q  P  K  A  A  P  S  V  T  L  F  P  P  S
ACC CGG CTG ACC GTC CTA GGT CAG CCC AAG GCT GCC CCC TCG GTC ACT CTG TTC CCG CCC TCC
    378          387          396          405          414          423          432

S  E  E  L  Q  A  N  K  A  T  L  V  C  L  I  S  D  F  Y  P  G
TCT GAG GAG CTT CAA GCC AAC AAG GCC ACA CTG GTG TGT CTC ATA AGT GAC TTC TAC CCG GGA
    441          450          459          468          477          486          495

A  V  T  V  A  W  K  A  D  S  S  P  V  K  A  G  V  E  T  T  T
GCC GTG ACA GTG GCC TGG AAG GCA GAT AGC AGC CCC GTC AAG GCG GGA GTG GAG ACC ACC ACA
    504          513          522          531          540          549          558

P  S  K  Q  S  N  N  K  Y  A  A  S  S  Y  L  S  L  T  P  E  Q
CCC TCC AAA CAA AGC AAC AAC AAG TAC GCG GCC AGC AGC TAC CTG AGC CTG ACG CCT GAG CAG
    567          576          585          594          603          612          621

W  K  S  H  R  S  Y  S  C  Q  V  T  H  E  G  S  T  V  E  K  T
TGG AAG TCC CAC AGA AGC TAC AGC TGC CAG GTC ACG CAT GAA GGG AGC ACC GTG GAG AAG ACA
    630          639          648          657          666          675          684

V  A  P  T  E  C  S
GTG GCC CCT ACA GAA TGT TCA TGA
    693          702          711
  
```

FIGURE 5b

Length of 16C10 heavy/primatized: 1431 bp;
 Listed from: 1 to: 1431;
 Translated from: 1 to: 1429 (Entire region);
 Genetic Code used: Universal; Fri, May 26, 1995 11:08 AM

```

Frame 1  M  K  H  L  W  F  F  L  L  L  V  A  A  P  R  W  V  L  S
          ATG AAA CAC CTG TGG TTC TTC CTC CTC CTG GTG GCA GCT CCC AGA TGG GTC CTG TCC
                9                18                27                36                45                54

Q  V  Q  L  Q  E  S  G  P  G  L  V  K  P  S  E  T  L  S  L  T
CAG GTG CAG CTG CAG GAG TCG GGC CCA GGA CTG GTG AAG CCT TCG GAG ACC CTG TCC CTC ACC
    63                72                81                90                99                108                117

C  A  V  S  G  G  S  I  S  G  G  Y  G  W  G  W  I  R  Q  P  P
TGC GCT GTC TCT GGT GGC TCC ATC AGC GGT GGT TAT GGC TGG GGC TGG ATC CGC CAG CCC CCA
    126                135                144                153                162                171                180

G  K  G  L  E  W  I  G  S  F  Y  S  S  S  G  N  T  Y  Y  N  P
GGG AAG GGG CTG GAG TGG ATT GGG AGT TTC TAT AGT AGT AGT GGG AAC ACC TAC TAC AAC CCC
    189                198                207                216                225                234                243

S  L  K  S  Q  V  T  I  S  T  D  T  S  K  N  Q  F  S  L  K  L
TCC CTC AAG AGT CAA GTC ACC ATT TCA ACA GAC ACG TCC AAG AAC CAG TTC TCC CTG AAG CTG
    252                261                270                279                288                297                306

N  S  M  T  A  A  D  T  A  V  Y  Y  C  V  R  D  R  L  F  S  V
AAC TCT ATG ACC GCC GCG GAC ACG GCC GTG TAT TAC TGT GTG AGA GAT CGT CTT TTT TCA GTT
    315                324                333                342                351                360                369

V  G  M  V  Y  N  N  W  E  D  V  W  G  P  G  V  L  V  T  V  S
GTT GGA ATG GTT TAC AAC AAC TGG TTC GAT GTC TGG GGC CCG GGA GTC CTG GTC ACC GTC TCC
    378                387                396                405                414                423                432

S  A  S  T  K  G  P  S  V  F  P  L  A  P  S  S  K  S  T  S  G
TCA GCT AGC ACC AAG GGC CCA TCG GTC TTC CCC CTG GCA CCC TCC TCC AAG AGC ACC TCT GGG
    441                450                459                468                477                486                495

G  T  A  A  L  G  C  L  V  K  D  Y  F  P  E  P  V  T  V  S  W
GGC ACA GCG GCC CTG GGC TGC CTG GTC AAG GAC TAC TTC CCC GAA CCG GTG ACG GTG TCG TGG
    504                513                522                531                540                549                558

N  S  G  A  L  T  S  G  V  H  T  F  P  A  V  L  Q  S  S  G  L
AAC TCA GGC GCC CTG ACC AGC GGC GTG CAC ACC TTC CCG GCT GTC CTA CAG TCC TCA GGA CTC
    567                576                585                594                603                612                621

Y  S  L  S  S  V  V  T  V  P  S  S  S  L  G  T  Q  T  Y  I  C
TAC TCC CTC AGC AGC GTG GTG ACC GTG CCC TCC AGC AGC TTG GGC ACC CAG ACC TAC TAC ATC TGC
    630                639                648                657                666                675                684

N  V  N  H  K  P  S  N  T  K  V  D  K  K  A  E  P  K  S  C  D
AAC GTG AAT CAC AAG CCC AGC AAC ACC AAG GTG GAC AAG AAA GCA GAG CCC AAA TCT TGT GAC
    693                702                711                720                729                738                747

K  T  H  T  C  P  P  C  P  A  P  E  L  L  G  G  P  S  V  F  L
AAA ACT CAC ACA TGC CCA CCG TGC CCA GCA CCT GAA CTC CTG GGG GGA CCG TCA GTC TTC CTC
    756                765                774                783                792                801                810

F  P  P  K  P  K  D  T  L  M  I  S  R  T  P  E  V  T  C  V  V
TTC CCC CCA AAA CCC AAG GAC ACC CTC ATG ATC TCC CGG ACC CCT GAG GTC ACA TGC GTG GTG
    819                828                837                846                855                864                873

V  D  V  S  H  E  D  P  E  V  K  F  N  W  Y  V  D  G  V  E  V
GTG GAC GTG AGC CAC GAA GAC CCT GAG GTC AAG TTC AAC TGG TAC GTG GAC GGC GTG GAG GTG
  
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FIGURE 5b (Continued)

882			891			900			909			918			927			936			
H	N	A	K	T	K	P	R	E	E	Q	Y	N	S	T	Y	R	V	V	S	V	
CAT	AAT	GCC	AAG	ACA	AAG	CCG	CGG	GAG	GAG	CAG	TAC	AAC	AGC	ACG	TAC	CGT	GTG	GTC	AGC	GTC	
945			954				963			972			981			990			999		
L	T	V	L	H	Q	D	W	L	N	G	K	E	Y	K	C	K	V	S	N	K	
CTC	ACC	GTC	CTG	CAC	CAG	GAC	TGG	CTG	AAT	GGC	AAG	GAG	TAC	AAG	TGC	AAG	GTC	TCC	AAC	AAA	
1008			1017			1026			1035				1044			1053			1062		
A	L	P	A	P	I	E	K	T	I	S	K	A	K	G	Q	P	R	E	P	Q	
GCC	CTC	CCA	GCC	CCC	ATC	GAG	AAA	ACC	ATC	TCC	AAA	GCC	AAA	GGG	CAG	CCC	CGA	GAA	CCA	CAG	
1071			1080			1089			1098				1107			1116			1125		
V	Y	T	L	P	P	S	R	D	E	L	T	K	N	Q	V	S	L	T	C	L	
GTG	TAC	ACC	CTG	CCC	CCA	TCC	CGG	GAT	GAG	CTG	ACC	AAG	AAC	CAG	GTG	AGC	CTG	ACC	TGC		
1134			1143			1152			1161				1170			1179			1188		
V	K	G	F	Y	P	S	D	I	A	V	E	W	E	S	N	G	Q	P	E	N	
GTC	AAA	GGC	TTC	TAT	CCC	AGC	GAC	ATC	GCC	GTG	GAG	TGG	GAG	AGC	AAT	GGG	CAG	CCG	GAG		
1197			1206			1215			1224				1233			1242			1251		
N	Y	K	T	T	P	P	V	L	D	S	D	G	S	F	F	L	Y	S	K	L	
AAC	TAC	AAG	ACC	ACG	CCT	CCC	GTG	CTG	GAC	TCC	GAC	GGC	TCC	TTC	TTC	CTC	TAC	AGC	AAG		
1260			1269			1278			1287				1296			1305			1314		
T	V	D	K	S	R	W	Q	Q	G	N	V	F	S	C	S	V	M	H	E	A	
ACC	GTG	GAC	AAG	AGC	AGG	TGG	CAG	CAG	GGG	AAC	GTC	TTC	TCA	TGC	TCC	GTG	ATG	CAT	GAG		
1323			1332			1341			1350				1359			1368			1377		
L	H	N	H	Y	T	Q	K	S	L	S	L	S	P	G	K						
CTG	CAG	AAC	CAC	TAC	ACG	CAG	AAG	AGC	CTC	TCC	CTG	TCT	CCG	GGT	AAA	TGA					
1386			1395			1404			1413				1422			1431					

Figure 6

Competitive Binding of CTLA-4Ig-Biotin to B7-1 Transfected CHO Cells
in Presence of P16C10 MA b, CTLA-4Ig and B7-1Ig Fusion Proteins

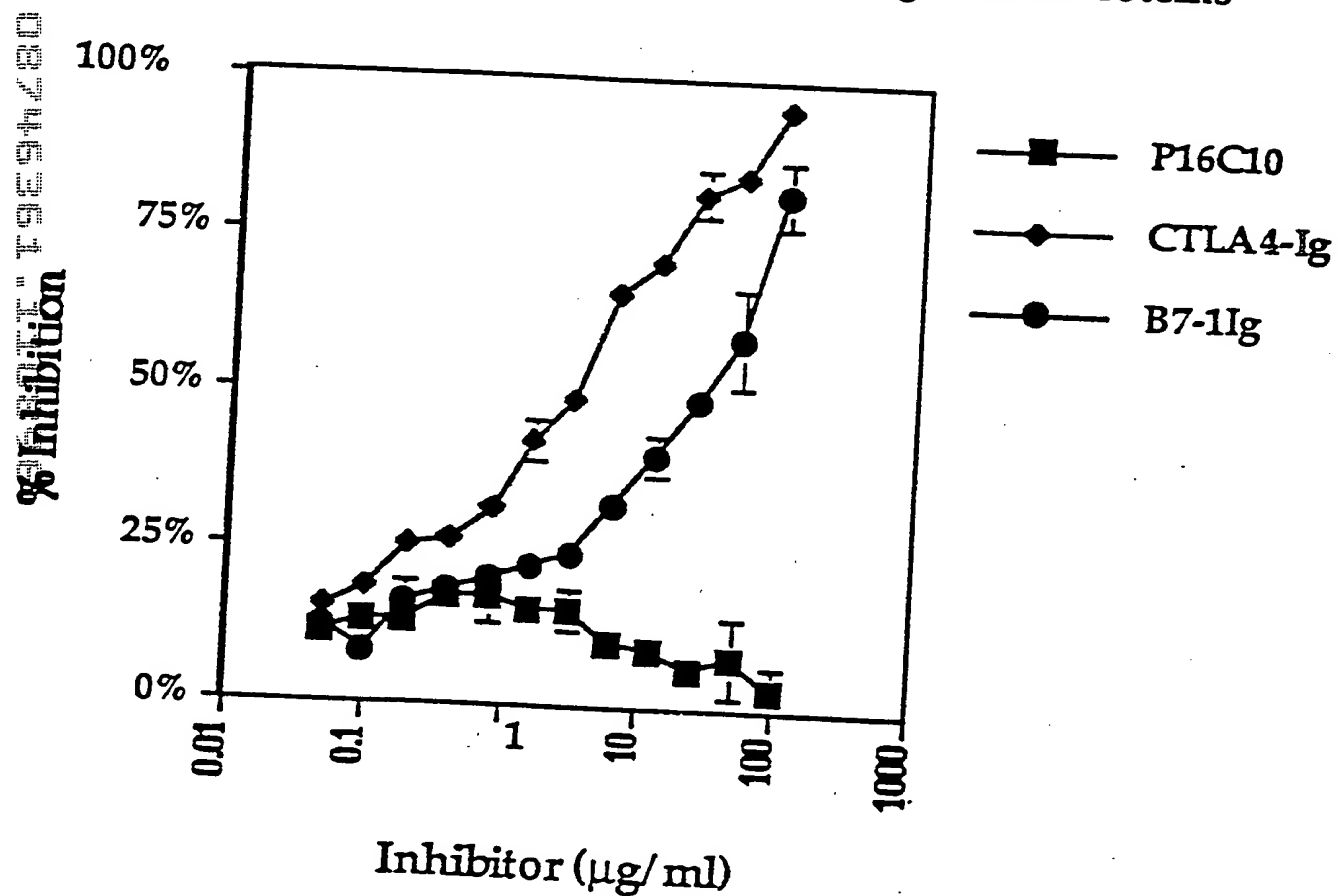


Figure 7

Competitive Binding of P16C10-Biotin to B7-1 Transfected CHO Cells
in Presence of P16C10 MAb, CTLA-4Ig and B7-1Ig Fusion Proteins

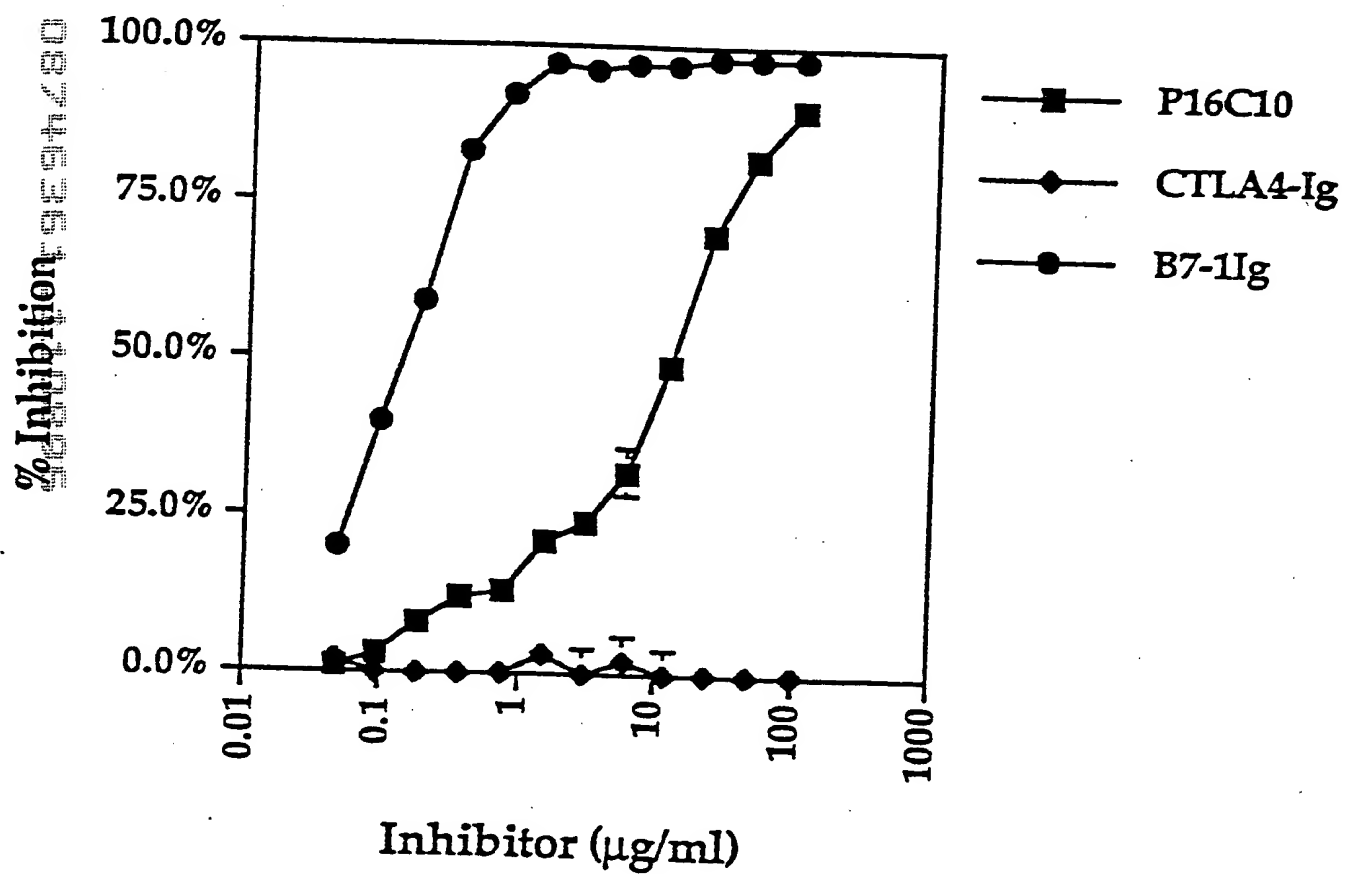


Figure 8

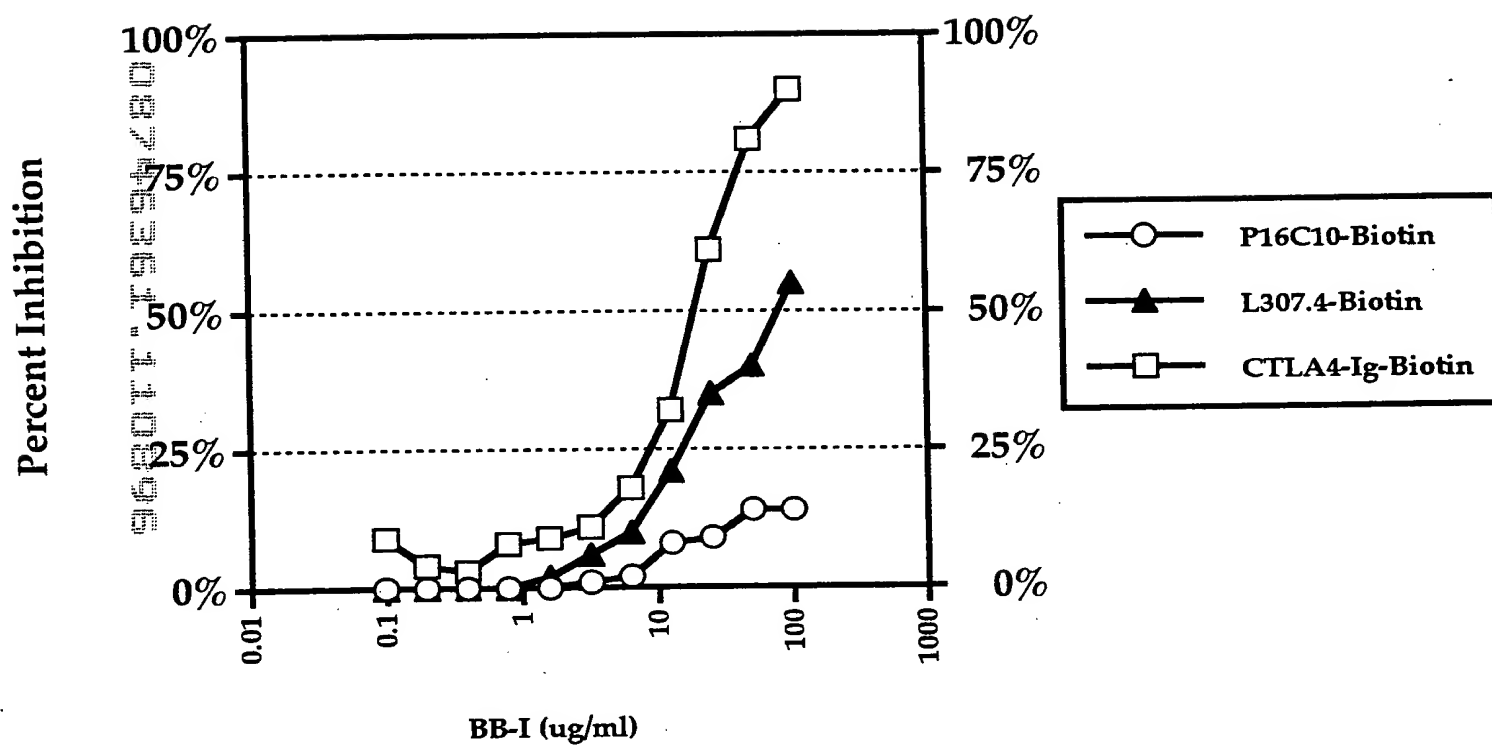


Figure 9

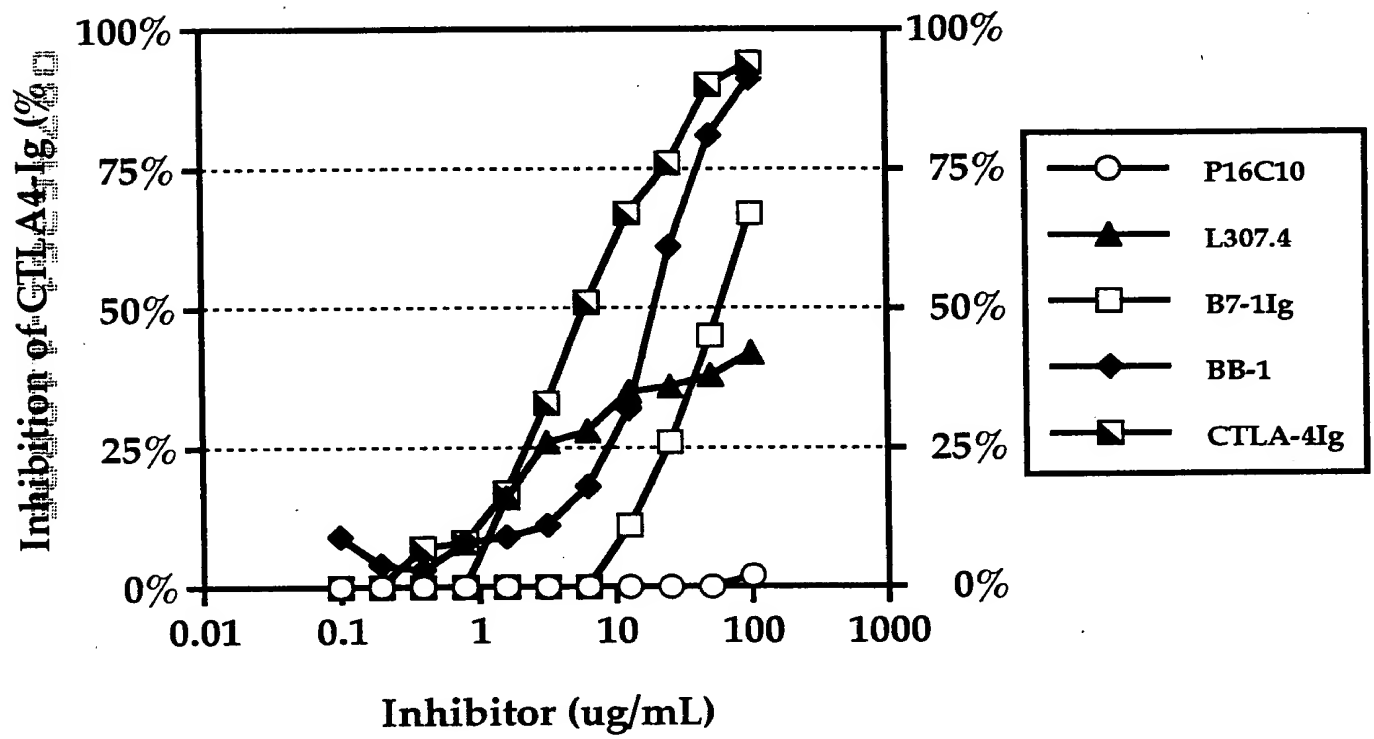


Figure 10

Competitive Inhibition of Radiolabeled B7-1Ig Binding to CD28 Receptors on Isolated Non-Activated Peripheral Blood T Cells using Unlabeled Binding Proteins Recognizing Either B7-1 or CD28

